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LETTER FROM U S NAVY REGARDING THREE PHASE PLAN FOR WELLHEAD
PROTECTION PLAN DEVELOPMENT FEBRUARY 1997 NSWC INDIAN HEAD MD
7/9/1997
NSWC INDIAN HEAD



DEPARTMENT OF THE NAVY
INDIAN HEAD DIVISION
NAVAL SURFACE WARFARE CENTER
101 STRAUSS AVE
INDIAN HEAD MD 20640-5035

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Ser 045H/117
9 Jul 97

Mr. Norman Lazarus
Maryland Department of the Environment
Public Drinking Water Program
2500 Broening Highway
Baltimore, MD 21224

Dear Mr. Lazarus:

During our meeting in February 1997, we discussed the development of a wellhead protection plan for the Indian Head Division, Naval Surface Warfare Center. A three phase plan has been developed and is presented below.

Phase I - The location and documentation of the status of wells identified on the USGS Survey of 1990. These wells were discussed at our February 1997 meeting as needing documentation of closure status. The results of the site visits and gathering of documentation that completes Phase I are included as Enclosure (1). Over 40 hours of on-site investigation were employed by two environmental office personnel in an effort to locate these wells. The USGS Survey identified 57 wells; 20 wells were physically located (this included active wells), 14 wells have sealing reports on file, 20 wells have other sources of information indicating they have been closed (notation on Well Completion Reports by the well driller, previous memo or survey results, etc.), and 3 Stump Neck wells were not able to be located and insufficient information was available to determine their status. These wells are USGS wells Cb10 (NSWC well #13SN), Cb26 (NSWC well #1SN), and Cb30 (no NSWC well #). Efforts were made to physically locate these wells during an on-site visit to Stump Neck Annex on March 12, 1997. No application permits, state permit numbers or other documents of record were available to determine location of these wells. Old Indian Head Division maps, an old listing of buildings, the USGS Survey map, and talking with long-time employees were methods used to try to locate the sites of these wells. Results of this visit are stated in Enclosure (1). Previous attempts to locate these wells in 1988 were also unsuccessful.

Phase II - The evaluation of wells 6, 7, 9, 11SN, 12 and 43SN and contract to have the wells repaired, sealed, or replaced. At our February 1997 meeting, these wells were determined in need of evaluation because of the age of the wells and their present low production. Also, well 11SN needs to be evaluated. This well was located during the Phase I survey and is covered by a cement slab but no documentation is available on whether the well was ever sealed properly.

Funding for Phase II has been programmed in the FY98 budget under Wellhead Protection/Various Upgrades in the amount of \$150,000. Additional funds will be requested after evaluation of the wells to complete evaluation recommendations.

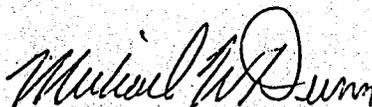
Phase III - The development of a database to track existing and future wells. This tracking database will be updated as new wells are reported and includes a file for deposit of documents (well completion reports, abandonment reports, etc.). Observation wells, test wells, and monitoring wells for Installation Restoration (IR) sites and underground storage tanks are also tracked in this database. This database is completed to date and is included as Enclosure (2). Information in this database includes well number, date drilled, well driller, Sealing Report, Application for Permit to Drill Well, Appropriation Permit number, Well Completion Report, Certificate of Potability, the location where the Drilling Log and repair history files are located, and comments. All new wells must be reported to the Environmental Office to be placed on the tracking database. All new wells must be reviewed by the Activity National Environmental Policy Act (NEPA) coordinator to be screened for proximity to potential contamination sources, such as IR sites and underground storage tanks. We will include locations of all presently active and future wells in a Geographical Information System (GIS) for accurate mapping and identify all active well sites with signs. (Our Natural Resources Office is in the process of purchasing Global Positioning System equipment, which uses satellite technology for precise coordinates, to use with the GIS.) A separate database will be developed for all production wells. Information in this database will include test results from the 1992 and 1995 compliance sampling which included results for radionuclides, SOCs, VOCs, inorganics, flouride, sodium, secondary contaminants, and annual nitrate test results. This will be an ongoing project to include future analysis results of periodic raw water samples of compliance parameters.

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Thank you for your assistance in establishing a Wellhead Protection Plan for our Activity. If you have any questions regarding the proposed plan or the attached survey of wells, please contact Ms. Katherine Frey of my office on (301) 743-4320.

Sincerely,



MICHAEL W. DUNN
Director, Air, Water, & Natural
Resources Management Division
By direction of the Commander

Encl:

- (1) Well Information - Field Results and Status
- (2) Wellfile Database